

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED CENTRAL FAX CENTER

AUG 2 3 2004

In re Appln. of:

SUNIL PALAKODATI et al.

Appln. No.:

10/041,094

Filed:

December 28, 2001

For:

ELECTRIC POWER ASSIST

STEERING SYSTEM WITH

ROLLER GEARBOX

Attomey Docket No: 10541-183

Examiner: Tony Winner

Art Unit: 3611

Commissioner for Patents U.S. Patent and Trademark Office P. O. Box 1450 Alexandria, VA 22313-1450

RENEWED PETITION UNDER 37 C.F.R. 1.181(a)

REQUESTING WITHDRAWAL OF THE HOLDING OF ABANDONMENT

Applicant herein submits a renewed petition to the Director for withdrawal of the examiner's holding of abandonment on the basis that the application is in fact not abandoned. This Petition is being timely submitted within two months of the mailing date of the Decision on Petition to Withdraw the Holding of Abandonment.

Supporting Facts

In the Notice of Abandonment (Attachment A) dated February 10, 2004, the present application was indicated as being abandoned for failure to timely reply to the Office Action mailed on June 27, 2003. The Notice of Abandonment indicated that no reply was received by the Office. However, a review of the undersigned's application file indicates that a proper reply to the Office Action was timely submitted via facsimile.

Since the Office Action was mailed on June 27, 2003, the shortened statutory period for filing of the response fell due on September 27, 2003, which was a Saturday. On Monday, September 29, 2003, the response was filed and received by the U.S. Patent and Trademark Office ("Office") at 12:59 p.m. PST.

BAINK HOFE GIL 50 BRINKS HOFER GILSON & LIONE P.O. Box 10395 Chicago, IL 60610



Serial No. 10/041,094

Attorney Docket No. 10541-183

In support of the above, Attachment B to this petition is a complete copy of the "Reply Under 37 C.F.R. §1.111" ("Reply"), including its attachments, as previously submitted on September 29, 2003. That Reply included as its attachments a Declaration Under 37 C.F.R. §1.132 duly signed by one of the inventors.

The Reply was signed and transmitted by Dr. Schein (an attorney who at the time was associated the undersigned and the firm of Brinks Hofer Gilson & Lione) to a facsimile number (703-308-2571) provided to Dr. Schein by the examiner, Examiner Winner. Since the facsimile number provided by the examiner would not accept the transmission, Dr. Schein attempted to contacted the group secretary for Art Unit 3611 and directed by the group secretary to send the transmission to to facsimile number (703) 872-9325. This transmission was successful, and a copy of the receipt of successful facsimile transmission is attached hereto as Attachment C.

In further support of the above, a copy of email correspondence between Examiner Winner and Dr. Schein regarding the sending of the Reply is provided herewith as Attachment D. Finally, a declaration by Dr. Schein and attesting to his personal knowledge of the facts and of the sending of the facsimile transmission is provided as Attachment E.

Fees

Since this is a petition to the Director under 37 C.F.R. 1.181(a), no fee is required. However, the Commissioner/Director is hereby authorized to charge any fee deficiency associated with the filing of this Petition to the deposit account as indicated in the Transmittal accompanying this Petition.

Conclusion

In view of the above, it is respectfully submitted that there has been no abandonment in fact and that the Notice of Abandonment was issued in error. The Notice of Abandonment should therefore be withdrawn. Such action is respectfully requested.

If there are any questions regarding this matter, please contact the undersigned attorney at (734) 302-6038.

-2-

08/23/2004 14:10 FAX 17349946331

August 23, 2004

Serial No. 10/041,094

Date

Attorney Docket No. 10541-183

Respectfully submitted,

Enc J. Spsenko (Reg. No. 34,440)

Attorney for Applicants

BRINKS HOFER GILSON & LIONE P.O. Box 10395 ALIONE Chicago, IL 60610

08/23/2004 14:10 FAX 17349946331



.) ATTACHMENT .

91

•	Application No.	Applicant(s)		
Notice of Abandonment	10/041.034	PALAKODATI ET AL.		
	Examiner	Art Unit		
	Tony H. Winner	3611		
The MAILING DATE of this communication and			ldrass_	
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-				
This application is abandoned in view of:				
 Applicant's failure to timely file a proper reply to the Office (a) A reply was received on (with a Certificate of National period for reply (including a total extension of time of 	Mailing or Transmission dated	·		
(b) A proposed reply was received on, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.				
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).				
(c) A reply was received on but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).				
(d) 🖾 No reply has been received.		-		
 2. Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85). (a) The issue fee and publication fee, if applicable, was received on (with a Certificate of Mailing or Transmission dated 				
), which is after the expiration of the statutory p Allowance (PTOL-85).	eriod for payment of the issue fee (a	nd publication fee)	set in the Notice of	
(b) The submitted fee of \$ is insufficient. A balance of \$ is due.				
The issue fee required by 37 CFR 1.18 is \$ The publication fee, if required by 37 CFR 1.18(d), is \$				
(c) The issue fee and publication fee, if applicable, has not been received.				
 Applicant's failure to timely file corrected drawings as req Allowability (PTO-37). 				
(a) Proposed corrected drawings were received on (with a Certificate of Mailing or Transmission dated), which is after the expiration of the period for reply.				
(b) ☐ No corrected drawings have been received.			•	
4. The letter of express abandonment which is signed by the the applicants.	e allorney or agent of record, the as	signee of the entire	interest, or all of	
 The letter of express abandonment which is signed by at 1.34(a)) upon the filing of a continuing application. 	n attorney or agent (acting in a repre	sentative capacity ų	nder 37 CFR	
6. The decision by the Board of Patent Appeals and Interfer of the decision has expired and there are no allowed class	rence rendered on and becaums.	se the period for se	eking court review	
7. The reason(s) below:				
·		TONYWINNER		
	Ĭ	WENT EXAMINE	ir.	
		2/7/04		
Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraininize any negative effects on patent term.	aw the holding of abandonment under 37	' CFR 1.161, should be	e promptly filed to	
J.S. Palent and Trademark Office				

PTOL-1432 (Rev. 04-01)

Netice of Abandonment

Part of Paper No. 13

Ø 006

OFFICIAL

RECEIVED
CENTRAL FAX CENTER

AUG 23 2001

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mall in an envelope, with sufficient postage, addressed to: Commissioner for Patents, P.O. Box 1450, Arlington, VA 22313–1450, or sent via facsimile to the facsimile number indicated below if one is indicated, on the date indicated below:

703-872-9325
Facsimile # (only if transmitted by facsimile)

Daniel B. Scheln, Ph.D., Esq., Reg. No. 33,551

September 29, 2003

Our Case No. 10541-183

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Sunil PALAKODATI et al.

Serial No.: 10/041,094

Filling Date: December 28, 2001

)

Examiner: Tony Winner

Group Art Unit No.: 3611

Mail Stop Non-Fee Amendment Commissioner For Patents P.O. Box 1450 Alexandria, CA 22313-1450

TRANSMITTAL LETTER

Attached hereto are:

1. An 8 page Reply Under 37 C.F.R. §1.111; and

A 3 page Declaration Under 37 C.F.R. §1.132.

Respectfully submitted.

Daniel B. Schein, Reg. No. 33,551 BRINKS HOFER GILSON & LIONE

P.O. BOX 10395

CHICAGO, ILLINOIS 60610

Tel: 408-971-0627 Fax: 408-971-0627

RECEIVED CENTRAL FAX CENTER AUG 2 3 2004

OFFICIAL

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope, with sufficient postage, addressed to:

Commissioner for Palents, P.O. Box 1450, Arlington, VA 22313-1450, or sent via facsimile to the facsimile number indicated below if one is indicated, on the date indicated below:

Facsimile # (only if sent via facsimile)

Daniel B. Schein, Ph.D., Esq., Reg. No. 33,551

Our Case No. 10541-183

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

÷

In re Application of:

Sunil PALAKODATI et al.

Serial No.: 10/041,094

Filling Date: December 28, 2001

Entitled: ELECTRIC POWER ASSIST
STEERING SYSTEM WITH
ROLLER GEARBOX

Sunil PALAKODATI et al.

Examiner: Tony Winner

Group Art Unit No.: 3611

Mail Stop Non-Fee Amendment Commissioner For Patents P.O. Box 1450 Alexandria, CA 22313-1450

REPLY UNDER 37 C.F.R. §1.111

This Reply is in timely response to the Office Action mailed June 27, 2003. This response is timely filed on September 29, 2003, as September 27, 2003 is a Saturday. The claims and their current status is presented below.

1

- 1. (Previously amended) A roller pinlon gear for use in a power assist steering system, comprising a roller wheel having a plurality of radially projecting teeth about its periphery, wherein said teeth comprise pins rotatably mounted in and projecting from the periphery of said roller wheel, wherein said gear can be used to transfer power from a rotating output shaft to a plnion in a vehicle power assist steering system.
- 2. (Original) The pinion gear of claim 1, further comprising a pinion shaft coupled to the roller wheel.
- 3. (Original) An assist pinion mechanism for a power assist steering system, comprising an assist pinion, and a roller pinion gear, wherein said assist pinion has a first end and a second end, wherein said first end may engage a rack, and said second end is coupled to said pinion gear, wherein said pinion gear comprises a roller wheel having a plurality of radially projecting teeth about its periphery, wherein said teeth comprise pins rotatably mounted in and projecting from the periphery of said roller wheel.
- 4. (Original) The pinion mechanism of claim 3, further comprising a roller screw, wherein said roller screw has a threaded portion having helical threads thereon, and said threaded portion is situated to engage at least one of said pins upon rotation of said roller screw.
- 5. (Original) The pinion mechanism of claim 4, further comprising an electric motor having a rotating output shaft, wherein said output shaft is coupled to said roller screw.

- C. (Criginal) The pinion mechanism of claim 5, wherein the goar ratio between said roller screw and said assist pinion is between about 15:1 and about 22:1.
- 7. (Original) The pinlon mechanism of claim 5, wherein the gear ratio between said roller screw and said assist pinion is about 22:1.
- 8. (Original) The pinion mechanism of claim 5, wherein said mechanism has a power transfer efficiency greater than 70% at load torques above 200 in-lbf at 1000 rpm.
- 9. (Original) The pinion mechanism of claim 4, wherein said threaded portion of said roller screw has an arcuate contacting profile with regard to said roller wheel pins.
- 10. (Original) A power assist steering system, comprising a rack, an assist pinion, and a pinion gear, wherein said assist pinion has a first end and a second end, wherein said first end engages said rack, and said second end is coupled to said pinion gear, wherein said pinion gear comprises a roller wheel having a plurality of radially projecting teeth about its periphery, wherein said teeth comprise pins rotatably mounted in and projecting from the periphery of the roller wheel.
- 11. (Original) The steering system of claim 10, further comprising a roller screw, wherein said roller screw has a threaded portion having helical threads thereon, and said threaded portion is situated to engage at least one of said pins upon rotation of said roller screw.
- 12. (Original) The steering system of claim 11, further comprising an electric motor having a rotating output shaft, wherein said output shaft is coupled to said roller screw.

- 13. (Original) The steering system of claim 11, wherein said roller screw and said pinion gear have a gear ratio with respect to each other of about 15:1 to about 22:1.
- 14. (Original) The steering system of claim 12, wherein the gear ratio between said roller screw and sald assist pinion is about 22:1.
- 15. (Original) The steering system of claim 12, wherein the efficiency of torque transfer from the output of said motor to said assist pinion is greater than 70% at load torques above 200 in-lbf at 1000 rpm.
- 16. (Original) A power assist steering system, comprising an electric motor having a rotating output shaft, a steering mechanism, and a roller gear coupling said electric motor output shaft to said steering mechanism.
- 17 (Original) The steering system of claim 16, wherein said steering system comprises an assist pinion, and the power transfer efficiency between said output shaft and said assist pinion is greater than 70% at load torques above 200 in-lbf at 1000 rpm.
- 18. (Original) A method for transferring power from a rotating input shaft to an assist pinion in a power assist steering system, comprising coupling an assist pinion that forms part of a steering system to a rotating input shaft via a roller pinion gear, wherein the pinion gear comprises a roller wheel having a plurality of radially projecting teeth about its periphery, wherein said teeth comprise pins rotatably mounted in and projecting from the periphery of the roller wheel.

- 19. (Original) The method of claim 18, wherein said rotating input shaft turns a roller screw having helical threads thereon, wherein upon rotation of the roller screw at least one thread contacts at least one of said pins.
- 20. (Original) The method of claim 18, wherein the power transfer efficiency between said rotating input shaft and said assist pinion is greater than 70% at load torques above 200 in-lbf at 1000 rpm.
- 21. (Original) The method of claim 19, wherein the gear ratio between said rotating input shaft and said assist pinion is between about 15:1 to about 22:1.
- 22. (Original) The method of claim 19, wherein the gear ratio between said rotating input shaft and said assist pinion is about 22:1.

REMARKS

Counsel for applicants thanks Examiner Winner for the courtesy extended on the telephone on August 26, 2003. In light of that discussion, a Declaration under 37 CFR §1.132 of inventor Edward McElmeel is submitted herewith. It is understood from the telephone conversation of August 26, 2003 that such a Declaration would place the case for condition for allowance, and it is respectfully submitted that the Declaration of Mr. McElmeel is sufficient to overcome the basis of rejection set forth in the outstanding Office Action.

The sole outstanding basis asserted for the rejection of claims 1 – 22 is that they are obvious under 35 U.S.C. §103(a) over U.S. patent 616,525 ("Whitney") in combination with prior art power assist steering systems. It is respectfully submitted that such a combination is improper as there is no teaching or suggestion in the prior art to replace the gear mechanisms in prior steering systems with a roller gear, and in fact, one of skill in the art would be discouraged from doing so. This is evidenced by the fact that, in the 100 years since Whitney issued, and the decades that power assist steering systems have been in existence, no such combination has been made or suggested.

One of ordinary skill in the art would be discouraged from using a roller gear in a power assist steering system for a variety of reasons, which are set forth in the application and in Mr. McElmeel's Declaration. Further, the present inventions led to surprising and unexpected increases in power transfer efficiency, contrary to the belief that devices capable of higher torque loads would have lower efficiency. Further, the present inventions were accomplished using standard materials and gears, despite having to meet the unique size, weight and performance demands for vehicular use.

In order to facilitate, rather than hamper, vehicle performance, a vehicle power assist steering system must be small enough to fit into the space in a vehicle engine compartment around the engine, and should also be light weight. The pinion gear used to transfer energy from an output shaft to the assist pinion should also be as efficient as possible. Until the present invention, the increased size, complexity and weight of roller gears with respect to traditional sliding friction worm gears discouraged the use of a roller pinion gear in a vehicle power assist steering system. The prior art is devoid of any teaching of a roller pinion gear that can meet the engineering challenges associated with a vehicle power assist steering system, such as packaging size, weight, complexity, power transfer efficiency, durability, and costs; these challenges discouraged the consideration of a roller gear.

Assumingly solely for the sake of argument that one were to consider the possibility of using a roller gear in a power assist steering system, the substantial engineering challenges mentioned above had to be recognized and overcome to accomplish this, which the prior art does not do. In contrast, the present inventions surprisingly accomplish improved power transfer efficiency in a power assist steering system with a roller pinion gear despite the increased complexity of the roller gear. For example, power transfer efficiency greater than 70% at load torques above 200 in-lbf at 1000 rpm can be achieved with a pinion mechanism for a vehicle power assist steering system using the roller pinion gear of the present invention. The prior art does not teach a gear, pinion mechanism or power assist steering system as recited in the claims. Thus, even assuming solely the sake of argument that the prior art was combined as suggested in the Office Action it would not still not equal the present

08/23/2004 14:13 FAX 1734994633

invention. It is respectfully submitted that for these reasons alone that the case is in condition for allowance; thus, the Declaration is unnecessary, and is submitted solely for the sake of expediting prosecution.

In view of the foregoing, it is respectfully requested that a Notice of Allowance be issued. In the event this Reply does not place the case in condition for allowance, or if there are matters that can be resolved over the phone to expedite prosecution, it is requested that the Examiner please telephone the undersigned at (408) 971-0627.

Respectfully submitted,

Daniel B. Schein, Ph.D., Esa. Registration No. 33,551

Attorney for Applicants BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, ILLINOIS 60610

Tel: 408-971-0627 Fax: 408-971-0627

PATENT

ATTE ON A CONTRACT OF THE PARTY	CENTRAL FAX CENTER	
In re Application of	AUG 2 3 2004	
Palakodati et al.	Examiner: Tony H. Winner	
Serial No. 10/041,094	Atty. Docket: 10541-183	
Filing Date: December 28, 2001	Atty. Docket: 10541-183 OFFICIAL	
Entitled: ELECTRIC POWER ASSIST STEERING SYSTEM WITH ROLLER	, · · · · · · · · · · · · · · · · · · ·	

Commissioner For Patents P.O. Box 1450 Alexandria, CA 22313-1450

GEARBOX

DECLARATION UNDER 37 CFR §1.132 OF EDWARD FRANCIS McELMEEL Sir.

I, Edward Francis McElmeel, hereby declare the following:

- I am a co-inventor of the subject application and understand the inventions for
 which patent protection is sought. For the following reasons, the recited invention
 is not taught, suggested or made obvious by the prior art, including the cited art.
- 2. I am currently a Product Design Engineer for the assignee of the subject inventions, Visteon Global Technologies, Inc. ("Visteon"). I have worked in the field of Product Design since 1989, including holding previous positions in the field with ITT Automotive and Ford. I carned a Bachelor of Science degree in Mechanical Engineering from Lawrence Technological University. In addition to my current responsibilities for Visteon, I am studying to obtain a Master of Science degree in Engineering at Purdue University via a program at Visteon.
- Visteon produces automotive parts, including parts for power assist steering systems ("the field").
- 4. I have become familiar with many devices in the field and their methods of construction, and one of my focused interests since 1997 has been electric power assist steering systems. I helped develop and patent improvements in the field.

For example, I am a co-inventor of a Modular Electric Steering Gear Assembly claimed in U.S. Patent 6,520,274, which is assigned to Visteon.

- In the field, we have sought to produce devices at minimum cost that have maximum performance, without compromising fuel efficiency and safety if not enhancing both.
- A typical electric power assist steering ("EPAS") system uses a gear reducer/torque increasor ("power transfer gear") between an electric motor and an output pinion, which in turn is coupled to a rack. The power transfer gear must possess numerous characteristics:
 - a. durability to withstand fatigue and high impact input in use;
 - b. high efficiency;
 - c. gear reduction range of 15:1 to 22:1;
 - d. package flexibility; and
 - e. cost effective.
- 7. Power transfer gears that Visteon has been using are crossed helical and worm gear designs. Worm gears have been found acceptable for rack loads below 8500 N, and crossed helical gears have been found acceptable for rack loads up to 14000 N, but these are insufficient for the high stress environment in larger vehicles, such as light trucks or larger vehicles.
- While a roller gear was known to be able to handle higher loads, its complexity and other drawbacks led to numerous challenges that have discouraged its use for automotive purposes. For example, no prior solution existed for packaging the unit to be small enough to fit within the constraints of standard engine compartments, or how to design the unit against the vibratory challenges encountered in automotive use. To make a sufficiently small unit capable of handling higher loads was believed to require higher cost materials and special engineering of many parts for the rollers pins and seats. Further, it was believed that the higher load requirements, the greater complexity of the unit, and its consequent gear mass would lead to lower efficiency. Hence, no EPAS system has existed or been planned that used a roller gear.

- 9. Despite these challenges, the present inventions resulted in a roller gear that is surprising more efficient than a conventional worm gearbox. This is demonstrated in Figure 11 of the present application. At 1000 rpm, the roller gear of the present invention was found to be 10% more efficient than a worm gear. Yet the present invention is capable of handling significantly higher torque loads.
- 10. A further surprising result of the present inventions is that we did not have to resort to unusual high cost, high strength or exotic materials, but were able to design the present inventions from standard steel and aluminum and standard bearings.
- 11. One of ordinary skill in the art would find the present inventions both very surprising and useful, as they use standard materials, can meet various packaging requirements, handle higher loads, but yet are more efficient.
- 12. The uniqueness of the present inventions is evident by the fact that in the more than 100 years that roller gears have been known, and decades of power assist steering systems, no one has combined the two.
- 13. From my experience in the field and from obtaining a prior patent, I am aware that an invention must be novel and not obvious from the prior art. Further, I am aware of the cost and effort involved in the patenting process. I would not have pursued patenting the present invention through my employer unless it was new and not obvious. In this case, the inventions have surprising benefits not anticipated, such an increased efficiency, and use of a roller gear in a power assist steering system was discouraged for the reasons I mentioned above.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Edward Francis McElmed 9/29/03

Edward Francis McElmeel Date

BRINKS, HOFER, ET AL

ATTACHMENT C

* * COMMUNICATION RESULT REPORT (SEP. 29. 2003 12:59PM) * * *

TTI 4089710941

LE MODE OPTION ADDRESS (GROUP) RESULT PAGE

4 MEMORY TX 17038729325 OK P. 12/12

REASON FOR EPROR E-1) HANG UP OR LINE FAIL E-3) NO ANSWER

E-2) BUSY E-4) NO FACSIMILE CONNECTION

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope, with sufficient postage, addressed to: Commissioner for Patents, P.O. Box 1450, Arlington, VA 22313-1450, or sent via facsimile to the facsimile number indicated below if one is indicated, on the date indicated below:

703-872-9325
Facsimile # (only if transmitted by facsimile)

Dantel B. Schein, Ph.D., Esq., Reg. No. 33,551

September 29, 2003

Date of Signature

Our Case No. 10541-183

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE.

In re Application of:

Sunil PALAKODATI et al.

Serial No.: 10/041,094

Filing Date: December 28, 2001

Mail Stop Non-Fee Amendment Commissioner For Patents

Examiner: Tony Winner

Group Art Unit No.: 3611



Schein, Dan

From:

Schein, Dan

Sent:

Monday, September 29, 2003 1:01 PM Winner, Tony

To: Subject:

RE: 10/041094

Examiner Winner:

Thank you very much for responding to my request. Fax number 703-308-2571 would not accept the fax, so we sent it to 703-872-9325. We were advised by the group secretary that this was a good fax number to use for submitting amendments.

Could you please confirm when the amendment is forwarded to you.

Sincerely,

Dan Schein

----Original Message----

From: Winner, Tony [mailto:Tony.Winner@USPTO.GOV]

Sent: Saturday, September 27, 2003 8:33 AM

To: Schein, Dan

Subject: RE: 10/041094

Dr. Schein,

In reply to your phone message on 9/26/03, please send the amendment to this fax number (703)308-2571.

Examiner Winner. Patent & Trademark Office (703) 306-5957 9/27/03

----Original Message----

From: dschein@brinkssanjose.com [mailto:dschein@brinkssanjose.com]

Sent: Tuesday, March 11, 2003 2:57 PM

To: Tony.Winner@USPTO.GOV Subject: RE: 10/041094

Examiner Winner:

Thank you very much for the update.

Best regards,

Dan Schein

----Original Message----

From: Tony.Winner@USPTO.GOV [mailto:Tony.Winner@USPTO.GOV]

Sent: Tuesday, March 11, 2003 11:54 AM

To: dschein@brinkshofer.com

Subject: 10/041094

Dr. Schein,

I have received your documentation and in the process of reviewing it. Please allow a couple of days before I can get back to you.

sincerely,

Anthony H. Winner Patent Examiner 703-306-5957

P. 2

ATTACHMENT E

RECEIVE CENTRAL FAX CENTER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AUG 23

In re Appin, of:

SUNIL PALAKODATI et al.

Appln, No.:

10/041.094

Filed:

December 28, 2001

For:

ELECTRIC POWER ASSIST

STEERING SYSTEM WITH ROLLER GEARBOX

Attorney Docket No: 10541-183

Commissioner for Patents U.S. Patent and Trademark Office P. O. Box 1450 Alexandria, VA 22313-1450

Examiner: Tony Winner

Art Unit: 3611

DECLARATION OF DAN SCHEIN UNDER 37 C.F.R. 1.8(b)(3)

- I, Daniel B. Schein, do hereby state as follows:
- 1. I am an attorney and a member of the State Bar of the State of California, and I am registered to practice before the United States Patent and Trademark Office ("Office") with my registration number being 33,551.
- 2. At the time of the actions and facts mentioned below, I was an attorney with the law firm of Brinks Hofer Gilson & Lione and was the working attorney for the above reference patent application.
 - 3. An Office Action was mailed in the above matter on June 27, 2003.
- The shortened statutory period for responding to the Office Action fell due on September 27, 2003, a Saturday.
- On Monday, September 29, 2003, I filed, via facsimile, a Reply Under 37 C.F.R. 1.111 (which included a declaration by the inventor).

BRINKS HOFER: GILSON & LIONE . P.O. Box 10395 ~ Chicago, IL 60610

р. З

Serial No. 10/041,094

Attorney Docket No. 10541-183

- 6. The response was received by the Office at 12:59 p.m. PST, as indicated on the "Communication Result Report".
- 7. The Reply filed on September 29, 2003 was timely under 37 C.F.R. 1.7.
- 8. The Reply was transmitted to facsimile number 703-872-9325, as directed by the group secretary of Art Unit 3611, since the facsimile number (703-308-2571) provided by Examiner Winner would not accept the transmission.
- 9. All statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

22 Avg ust 2004

Daniel B. Schein, Ph.D., Esq.

Reg. No. 33,551

-2-